A control view on the behaviour of consumers

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A Control View on the Behaviour of Consumers: Turning the Triangle

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Consumers Emit Responses

Yesterday in the fast-food restaurant just around the corner, the person next to me placed the same order as I did. Were we doing the same thing, and what were we actually doing? Generally, the many textbooks on consumer behaviour have the same main title: "Consumer Behaviour", suggesting that it is transparent and clear what exactly consumer behaviour is. Obviously, consumer behaviour is the behaviour of consumers, and behaviour is what people do. But what do consumers do? The concept "consumer behaviour" is the subject of this article. The separate phases in consumer behaviour and the meaning of consumption *per se*[1] will not be treated. The focus is on what consumers do when they behave.

Commonly, models of consumer behaviour have the shape of a triangle on one of its sides, as shown in Figure 1. In the models, a large set of general motivational and perceptual components, like values, beliefs, norms and needs, leads to a smaller set of more specific components, which finally leads to one of a few components, like behavioural intention, which are expected ultimately to drive the target consumer behaviour under study.

Such models treat behaviour as a bullet which is fired from a gun: the intention triggers the release of motivational energy into an overt response. Motivation, "why consumers behave", and overt behavioural response, "what consumers do", are separated conceptually. Time progresses from left to right in Figure 1, since motivation, why, leads to behaviour, what. Behaviour is an obvious, almost trivial, component of the model. This is the *emission* view of consumer behaviour.

The theory of trying illustrates the emission view of consumer behaviour[2]. The final dependent variable in the theory is "trying", which is caused by the recency and the frequency of past trying, and the intention to try. The intention to try is caused by the attitude and the social norm towards trying. The attitude towards trying is caused by five components, including the attitude towards success, the attitude towards failure and the attitude towards the process of trying. The theory focuses on the structure of motivations underlying "trying". A future development in the theory might be to analyse what exactly "trying" is, how consumers try, and what it is that consumers try.

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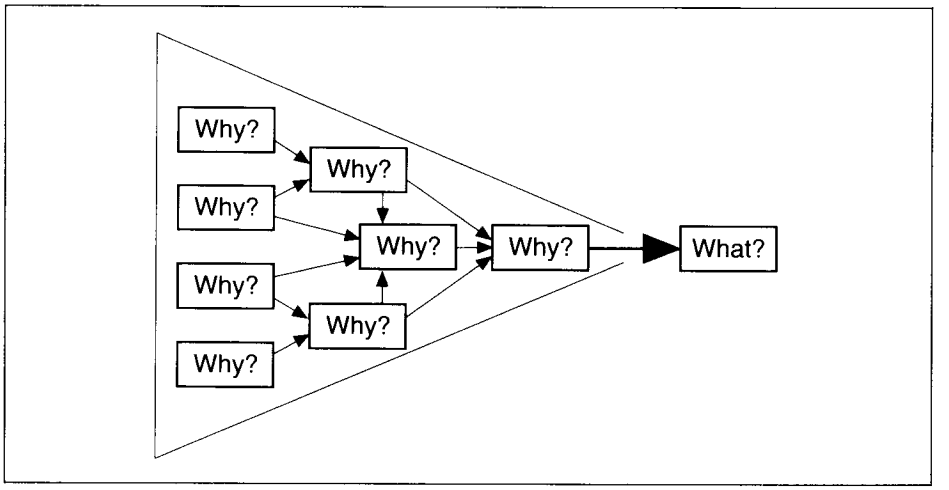

Figure 1.
A Common Form of Consumer Behaviour Models

The emission view of consumer behaviour assumes that:

- "actual" behaviour and its motivation are empirically or conceptually separate;
- the behaviour of consumers follows its motivation in time; and
- the behaviour of consumers is observable and obvious.

The emission view is contrasted with an alternative view in the sequel.

Consumers Control Behaviour

To ourselves, our behaviour is often not the emission of overt responses, but the control of perception[3]. An example may illustrate the point:

> Imagine observing a heating system including a furnace, a thermostat, and some device that allows the thermostat to affect the state of the furnace ("on" or "off"). It is snowing outside and the setting of the thermostat is high. The furnace is "on" for long periods of time. Then, briefly it is "off", and then it is "on" again. In the room where the thermostat is installed, the window is opened. The system reacts by keeping the furnace "on" for longer periods of time, and keeping it "off" for shorter periods of time.

What is the system doing? In the emission view of behaviour the answer is: the system is turning the furnace on and off (the equivalent of eyeblinking or pecking). The state of the furnace, on or off, is caused, after mediation by some electro-mechanical process, by the environmental stimuli. The opening of the windows "causes" the furnace to go on.

In the *control view* of behaviour the answer is: the system is maintaining a constant room temperature (the reference condition or goal). In the control view, the cause of the furnace going on and off is the thermostat setting, although there is no obvious relationship between the thermostat setting and the switching

pattern of the furnace. Normally, the setting of the room temperature predicts the actual room temperature, but it predicts neither the fuel bill nor the switching pattern of the furnace very well. The first aspect is a function of the thermostat setting, while the latter two are a function of the thermostat setting and of environmental circumstances like the outside temperature and whether the windows are open or closed. In other words, the heating system controls the room temperature[4]. If the heating system could "care" about something, it would care about the room temperature, not about the pattern of switching the furnace on and off.

Research in the emission view focuses on the differences in emissions or overt responses across different situations. Consumers are treated as mediators between environmental stimuli and desired overt responses. Exemplary research in this view analyses the *effects* of coupons on buying behaviours, the effects of music on the choice between coloured pens, the effect of strong arguments on intentions to buy disposable napkins and so forth.

Control refers to stability in the face of variability[5]. Research in the control view focuses on the aspects of the system which remain constant across situations, because of changes in the response rate of the system. Exemplary research in this view studies how consumers on a diet act in the face of temptation, how people shop for groceries when they experience a drop in salary, or how, in general, response patterns change to attain goals. The overt responses *per se* are only relevant in their effects on reaching or maintaining the reference condition.

The control view covers more than only the homeostatic, discrepancy reduction tendencies of consumers[6]. Consumers form goals which are discrepant from their current situation, heterostasis, and subsequently try to reduce the discrepancy between the goal and the actual situation[7]. In fact, continuously striving for higher and more difficult goals, may be a goal in itself. Consumers adapt to the environment and grow by combining heterostatic and homeostatic tendencies. Adoption of the control view has consequences for our understanding of consumer behaviour.

Consumer Behaviour is Latent

In the emission view, behaviour comprises the observable responses of the consumer[8]. For instance, Peter and Olsen[9] state that "behavior refers to the overt acts or actions of consumers that can be directly observed".

Such definitions exclude covert acts, like thinking, imagining, planning, and assume that behaviour can be observed.

Barker[10] and Barker *et al*[11], have studied behaviour by instructing observers simply to record, without any interpretation, what people do in real life situations. For example, Barker *et al.* analysed one day (12 May 1949) in the life of Mary Ennis, a young girl in Midwest USA. The observations start at 7.00 a.m.

This is part of what Mary did during the day, according to the observers:

(1) greeting observer,

(2) talking with brother,

(3) comforting brother,
(4) putting on house clothes,
(5) looking at brother,
(6) looking at observer,
(7) stretching,
(8) making own bed, ...
(137) going to classroom, ...
(966) going to bed,
(967) reading book.

The observers recorded that at 9.25 in the evening Mary fell asleep.

The number of emissions observed: 967 during a single day in the life of Mary Ennis. But what was Mary doing all day? Was she actually looking at her brother (segment 5.) when the observer recorded that in his observation scheme, or was she doing something else? Was she thinking about school, while staring in the direction of her brother? Was she admiring his white teeth? Was she looking for a family resemblance in his face? Is what an observer thinks an "actor" is doing necessarily the same as what the actor thinks she is doing?

On second thought, observing the emissions is not so easy. To infer from the emissions what people are actually doing (controlling) may be quite difficult, as Wells and LoSciuto[12] noted after observing consumers in a retail environment.

An example illustrates the point. During a session at a recent scientific conference, all the people present in the room completed a brief questionnaire, containing two questions. One of the two questions read: "Describe in one sentence as clear and as honest as possible *what* you were doing just before you received this questionnaire." The questionnaires were completed directly after the discussion of a presentation. A total of 28 people participated, including the chairman of the session. What were those people doing? The emissions are relatively homogeneous: most people had their eyes on the presenter or on a paper in front of them, while some people had just said something. The results showed that people were doing all kinds of things. Of the 28 people, seven mentioned that they were "thinking", while another eight were "listening". Four people were "reading", two people were "looking", two people were "discussing" something, one person was "trying to get up" (the next presenter), one person was "staring" (at the present author [*sic*]!, one person was "writing", one person was "doodling", and finally a person was "waiting" for what was going to happen next. Clearly, some of the behaviours could have been recorded by an outside observer. But can an observer distinguish people who think from people who listen? Moreover, of the seven people who were "thinking", one person thought about the behaviour of the chairman, another thought about the time left in the session (the chairman), one thought about the value of the work presented, another thought about his lectures next

week, while another thought about the next paper. An outside observer cannot record these differences in behaviour since they are unobservable, covert.

Observers may also introduce systematic bias in their reports. It has been found that observations are influenced by the implicit theories which the observers have about the co-occurrence of certain actions[13]. Chapman and Chapman[14] found that clinicians "saw" all kinds of signs of homosexuality in the verbal responses of their homosexual clients which were invalid, while they failed to "see" valid signs. Their ideas about what homosexuals should see affected their interpretation of the overt responses of the clients. An observer may not provide a valid account of the behaviour of an actor.

Such results can be interpreted as indicating the fallibility of the observer, and may lead to a call for using extra-individual measures, like scanner data to measure shopping behaviour. However, extra-individual measures may only indicate the emissions — not the behaviour of consumers. The natural gas consumed by households is not a measure of "energy saving behaviour" although it may be correlated with it. Also, extra-individual measures are often unavailable. Finally, if available, how should one deal with a discrepancy between the extra-individual measure and a truthful self-report of behaviour? In a relevant study, Cote, McCullough and Reilly[15] found that self-report and extra-individual measures (the garbage which consumers produced) of consumption patterns shared less than 25 per cent of the variance. The two measures were aggregated prior to the subsequent analyses.

Evidently, in research on, for example, car buying, an observation or a sales contract may be rather valid indicators of the emission. Observing or measuring externally what consumers do when they buy a car is a different matter. Observers may infer from the emissions what a person is controlling. Extra-individual measures may also indicate what the individual is controlling. Yet, in essence, the behaviour is unobservable. It is a latent construct. The most direct source of information about the behaviour of the consumer is usually the consumer.

Consumer Behaviour is Hierarchical

If behaviour is the control of subjective reference conditions, the content of the reference conditions and their relations to the emissions become relevant. Although the hierachical relationships between behaviours and goals has been mentioned often in psychology and decision making[16-18], only a few theories of consumer behaviour[19] have incorporated it.

Action identification theory[20] was developed to understand how people arrive at an idea of what they are doing, and what the effects of this "identification" of current behaviour are on subsequent behaviour. According to the theory, the identification of behaviour by the actor can vary between the mechanics of specific actions (low level) and the superordinate goals[21] that a person has set out to accomplish in life (high level). The level at which a behaviour is identified is "what a person is actually doing at a given piont in time", the reference condition that she is controlling.

Any identification of an action reflects a compromise between a concern for comprehensive understanding of the action and a concern for performing the action effectively (see also Rifkin[22]). Simple, well-rehearsed tasks tend to be identified on a high level (''What am I doing? I'm making breakfast''), since they need an overall scope. Complex or new tasks tend to be identified on a low level, since attention for detail, the mechanics, is necessary (''what am I doing? I'm pushing the buttons''). When tying their shoes in the morning, the three-year old might be ''tying his shoes'' while the father might be ''getting dressed''. There is a tendency to identify behaviour on the optimal level between the lowest and the highest level.

This analysis suggests that any behaviour, including consumer behaviour, has three aspects:

(1) Operation.

(2) Identification.

(3) Motivation.

The operation of behaviour comprises all observable (overt) and non-observable (covert) activity in which a person is engaged in order to behave. Operation encompasses the mechanics, means or ''how'' of behaviour. The identification of behaviour is the level at which the behaviour is maintained by the actor, the ''what'', the description of what the actor controls. The motivation of behaviour comprises the goals the actor is trying to achieve by operating. It encompasses the ends, the ''why'' of behaviour.

In Figure 2, the identification, operation and motivation of behaviour are depicted for a hypothetical situation. The connection from operation through identification to motivation forms a means-end chain. After identifying ''what'' one is doing, levels higher in the chain specify ''why'' one is doing it, while levels lower in the chain specify ''how'' one is doing it. Consequently, ''why'' and ''how'' people are behaving depends on ''what'' they are doing. In Figure 2, a person who identifies that she is ''dieting'' may do so because she wants ''to lose weight''. A person who identifies that she is engaged in ''losing weight'', an identification higher in the chain, may do so because she wants to ''be healthy''. An identification of a behaviour for one person may be a motivation of behaviour for another person, or for the same person in a different situation. Similarly, the answer to the question ''how'' a person performs a behaviour depends on the answer to the question ''what'' the person is doing (see Figure 2).

In Figure 2, vertically oriented arrows in the right part of the graph indicate the instrumentality of elements. Walking to work is here instrumental in exercising, which is instrumental in staying or being fit. The horizontal arrow from ''buying Light products'' to ''Using them'' denotes sequentiality or conditionality. A ''Light'' product has to be bought before it can be used, here. In Figure 2, the arrows in the left part of the graph indicate the direction of the connection between the three aspects of behaviour. The process starts with the horizontal arrow pointing at the identification. The arrow pointing up denotes the motivational direction, while the arrow pointing down denotes the operational direction.

In combination, the three aspects of behaviour form a *behaviour structure* (BS). A behaviour structure represents the perceived connections between the identifications, operations and motivations of a behaviour, for a particular person aggregated across situations, or for a particular situation across people. In a particular situation, only a small part of the total structure will be activated in a particular person. A behaviour structure resembles a hierarchical value map (HVM) in means-end chain theory[23]. Both are hierarchically ordered structures, with the most abstract "meanings" in the top. In a behaviour structure, sequential relations can be represented, next to instrumental relations, and the elements in the structure, e.g., "dieting" in Figure 2, derive their meaning from their position with respect to other elements, instead of from their own content only. However, Laddering interviews can be used to investigate behaviour structures.

In the hypothetical structure in Figure 2, several basic connections between operations and motivations, goals, are represented. Multifinality occurs when a single operation leads to two distinct goals, as in the case of "walking to work" that leads to "exercising" and "saving money". Equifinality occurs when two distinct operations lead to the same goal, both "playing tennis" and "walking to work" lead to "exercising".

In Figure 3, five basic motivation-operation connections in the behaviour structures of consumers are depicted. An operation that leads to attaining a particular goal is intrumental (A). Equifinality (B), multifinality (C) and sequential finality (E) have already been explained. Parallel finality (D) occurs when someone performs two separate operations at the same time, each operation leading to a distinct goal, like preparing dinner while listening to the news. In Belgium, the Eagle Institute offers in-company training during lunches and dinners, with the motto "Learn and Eat". In time budget analyses, not taking account of parallel finality may lead to finding that people behave more than 24 hours a day.

Hierarchical structures of goals, motivations or needs often have the form of a triangle (see, e.g., Hacker[16]). Many specific elements in the base lead to a few abstract elements in the top. A behaviour structure resembles the

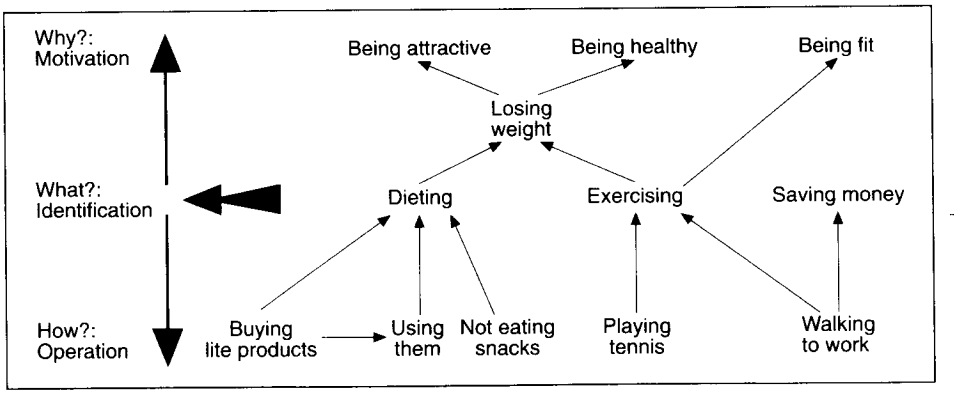

Figure 2. Operation, Identification and Motivation in a Behaviour Structure (BS)

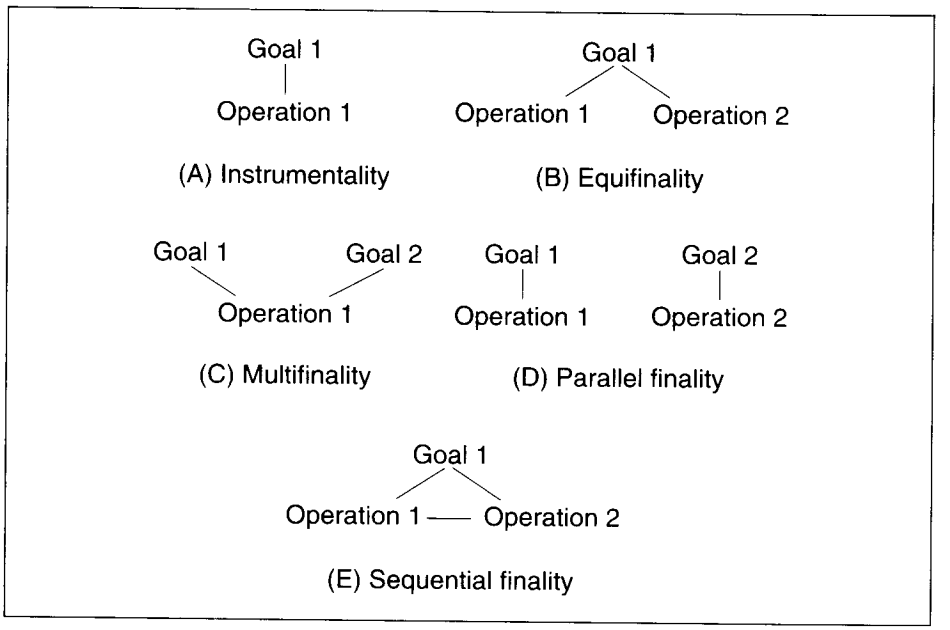

Figure 3.
Operation-motivation Connections

form of such a triangle when equifinality and sequential finality connections dominate. It resembles the form of an inverted triangle when multifinality connections dominate. In both cases, the dominant form of consumer behaviour models, the triangle on one of its sides (see Figure 1), is turned.

The analysis of the hierarchical nature of behaviour is related to script theory[24]. A script is a story-line of the sequence of possible events in a particular situation. Scripts are nested in higher-order structures. The script of "going to the dentist" may be an instance of the script "going to the doctor". Common elements of scripts, memory organization packages (MOPs), are represented in memory at a more general level, where they can be accessed when necessary. The thematic organizational packet (TOP) is the highest level, including values and goals like achieving power and being lovable. The approach suggested here differs from script theory. A behaviour structure comprises all elements of a behaviour as performed by consumers (in thier perception), while a script focuses on events that can be expected in a situation. Elements in a behaviour structure can have sequential and instrumental relations, instead of sequential relations only.

For research and measurement purposes, consumer behaviour is often treated as a series of discrete, well-separated responses: people go to a party, eat an apple, go to a weekend job, drink a soft drink, write a letter, have a sandwich and so forth (see[25, Table I]). In such a view, "behaving" is like the repetitive firing of a shotgun. The emission view is an observers view. Observers have little difficulty in determining the separate segments or operations in behaviour. However, this does not imply that behaviour is a sequence of well-separated operations in the mind of the actor.

> The real organism behaves in a smoothly continuous manner, with both responses and stimuli continually changing and continually interacting[3, p. 42].

Behaviour is a stream, in which the end of operations smoothly flows into the beginning of other operations, in which reaching a subgoal is followed by striving for new subgoals, or for higher level goals, in which several goals are striven for at the same time, and in which several things are "done" at the same time, in a continuous process (see also[26,27]). The higher the level at which behaviour is identified, the smoother it will tend to be perceived, while the lower it is identified, the more discrete and separated it will tend to be perceived.

Conclusion and Implications

Yesterday, in the fast-food restaurant, I was ordering my lunch, while the person next to me ordered a snack. We were doing different things with the same operations. Marketers and public policy makers are often interested in explaining, predicting and influencing particular emissions, overt operations, of consumers. If consumers "feel" that they shop at K-Mart, but in fact do not spend any money there, the K-Mart management will not be amused with these non-shopping shoppers. This external interest in consumer behaviour may explain the dominance of the emission view.

Models trying to close the gap between wanting, feeling, thinking on the one hand and behaving on the other hand (e.g., Bagozzi and Warshaw[2] tend to conceptualize the "internal, psychological" side of the equation in ever greater detail). Perhaps more focus on the conceptualization of behaviour is needed. Moreover, perhaps there are not two sides of the equation. What people do, and why and how, are aspects of a single structure:

> ...neither mind nor action is superordinate to the other. Actions generate mental representations, which in turn generate actions, and so on, in a cyclic interaction resulting in both more integrated action and more integrative understanding of action over time[20, p. 25].

Future research may try to understand how consumers arrive at identifications of behaviour, and what the role of outcome feedback in the process is. Why is it that sometimes consumers who do not diet, still feel that they do? More theory seems to be needed about the hierarchical aspects of consumer behaviour, and about the connections between identifications, operations and motivations. Next to theories that look like a triangle on one of its sides, theories might be developed in which the triangle is turned.

The control view is useful in analysing consumption and production behaviour. For instance, in service encounters, the identifications of the service provider and the customer can be studied in the course of time. Is the waiter "waiting" on his customers, "trying to please them" or "serving the vegetables"? Likewise, what the customer is controlling can be studied. In a service encounter, customer and service provider build a temporary joint system with its own reference conditions. The question is how the reference conditions are developed, set and maintained, and how customer and service provider react to environmental disturbances.

Often only single measures of the behaviour of consumers are used in research. In the study of Cote *et al.*[15] several measures were used. Unfortunately, the discrepancy between the self-reports and the extra-individual measures was resolved by averaging the two measures prior to the subsequent analyses. In future research, multiple measures of consumer behaviour might be collected to analyse when and why discrepancies between the measures occur, and what the consequences are for understanding, predicting and affecting future consumer behaviour.

Consumers can move up and down in a behaviour structure upon request. If asked in a survey whether they plan to do, are doing, or have done behaviour X, they move up or down in the behaviour structure, to see whether the behaviour can be identified at the indicated level X. However, this does not mean that the behaviour is normally identified at the indicated level. A behaviour that is identified on a very low level is associated with different goals, from a behaviour that is identified on a very high level, although both may be part of the same behaviour structure. An operant conditioning psychologist places the rat in a Skinner box containing only the behaviour options which are relevant to the experimenter. In a way, the closed-end question asking the respondent: "Did you eat an apple yesterday? Yes/No" is a verbal Skinner box. The interest is in the apple not in the consumer. If we are interested in understanding what consumers do, we might just ask them.

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